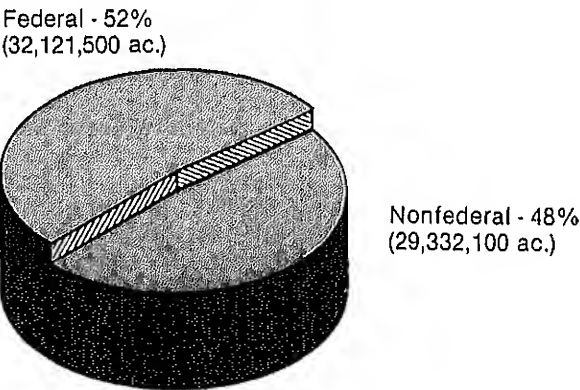


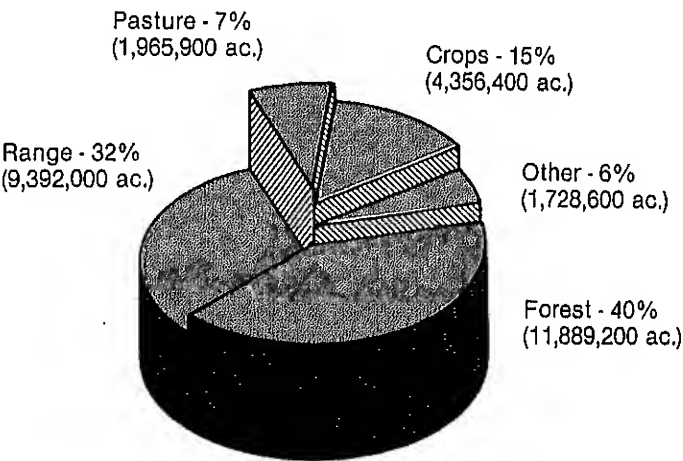
Land Use In Oregon

Almost half of Oregon's land area, over 29 million acres, is nonfederal land. This includes farms and ranches, other private land, Indian lands and land belonging to the State and local governments.

Land Ownership



Use of Nonfederal Land



Determining The Land's Potential: A Quick Guide

There are thousands of different soil types in Oregon and detailed information on the management of each is available from the Soil Conservation Service (SCS). Many of these data are published on a county basis in soil survey reports.

SCS also uses a more general, less detailed guide, called land capability classification, to determine the land's ability to grow crops. This system divides the rural landscape into eight classes, with Class I the best for growing crops and Class VIII unsuitable for growing any crops. These land capability groupings are widely used in Oregon by soil conservationists, planners, and farmers and ranchers.

Generally, Class I soils have few, if any, limitations that restrict their use. Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class III soils have severe limitations that reduce the choice of plants, require special conservation practices, or both. Class IV soils have very severe limitations that reduce the choice of plants, require very careful management, or both.

Class V soils are not likely to erode but have other limitations, impractical to remove, that limit their use largely to pasture or range, woodland, or wildlife. Class VI soils have severe limitations that make them generally unsuitable for cultivation and limit their use largely to pasture or range, woodland, or wildlife.

Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use largely to pasture or range, woodland, or wildlife. Class VIII soils and landforms have limitations that preclude their use for commercial crop production and restrict their use to recreation, wildlife, water supply, or esthetic purposes.

Foreword

This publication presents information about soil and water resources on almost half of Oregon's land — the nonfederal land where we grow crops, raise livestock, manage forests, and build our cities and towns.

The data presented are from the 1982 National Resources Inventory conducted by USDA's Soil Conservation Service. This comprehensive survey of our nation's nonfederal land resources was authorized by Section 302 of the 1972 Rural Development Act.

Although assessment of soil erosion was an important part of the inventory, it also included an evaluation of the use, condition, and need for conservation treatment on all our natural resources.

Sample units for the inventory were selected using standard statistical techniques. In Oregon about 5,000 sample units of 160 acres each were randomly selected to be inventoried. Onsite observations of resources were made at specific points within each sample unit. Findings were then statistically projected to reflect conditions both statewide and by major land resource area.

As you read this material, take into consideration that this is sample data and, therefore, subject to sampling error. Erosion rates given here are average annual rates based upon cropping practices, management practices and resource conditions.

Although the SCS, Soil and Water Conservation Districts, and others are working to control erosion, we are always one step away from the land. Landowners and user's decisions and actions are what finally result in conservation on the land.

Interest and concern, however, must be demonstrated by everyone. All Oregonians can help provide encouragement, and financial and technical support to reduce erosion to acceptable limits, to maintain cropland, rangeland, and forest productivity, and to improve water quality.

Published December 1985

USDA
Soil Conservation Service

Portland, Oregon

Programs and assistance of the U.S. Department of Agriculture are available without regard to race, creed, color, sex, age, or national origin.

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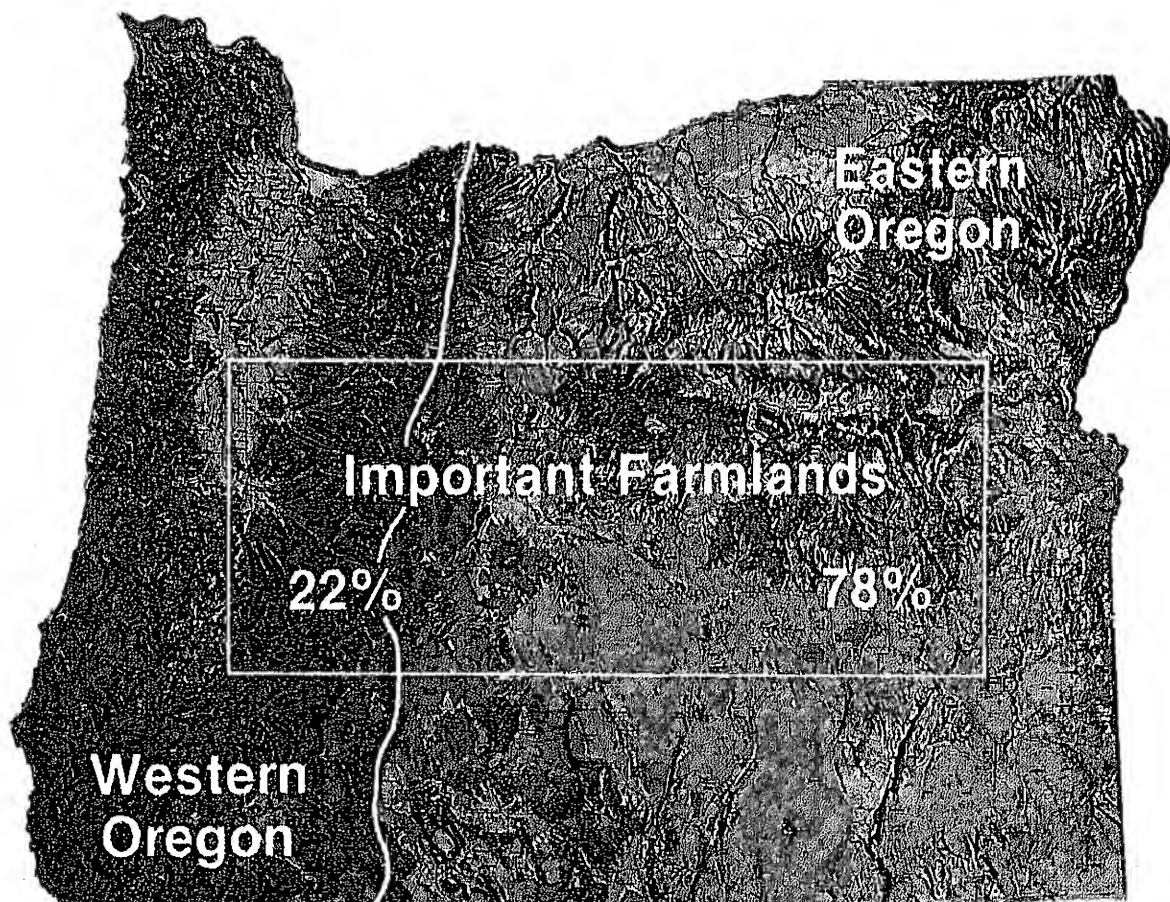
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Classes Of Land . . . And How We Use Them In Oregon

The Oregon Land Conservation and Development Commission (LCDC) has been directed by the Oregon Legislature to set up guidelines for land use. One of their goals is to preserve agricultural lands. To help accomplish this, LCDC has placed restrictions on development of land considered important farmland. LCDC uses land capability classifications to identify important farmland.

In western Oregon, where the mild climate and fertile valleys encompass over 3 million acres of agricultural land, LCDC considers Classes I through IV as important farmland.

In eastern Oregon the steep rolling terrain and more extreme climate includes almost 11 million acres of dry cropland and rangeland in Classes I through VI which are of enough agricultural importance LCDC includes them as Important farmlands.

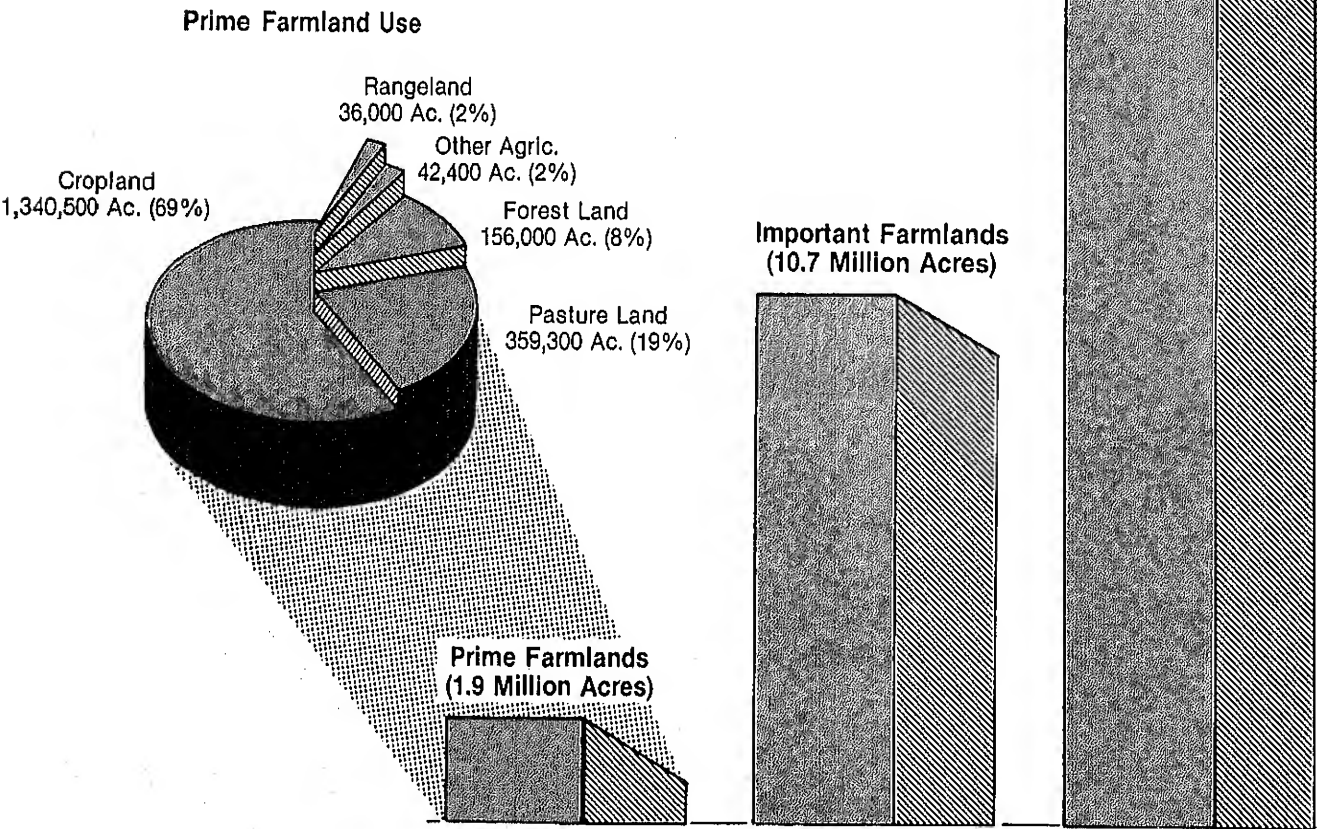


Oregon Prime Farmland

Prime farmland is Oregon's best, most productive cropland. Prime farmlands are nearly flat to gently sloping and are not susceptible to serious soil erosion. They are our most energy-efficient acres, producing the most food, feed and forage crops with the least amount of fuel, fertilizer, and labor.

Naturally, these lands are also well suited for other uses. Each year, thousands of acres of prime farmland are converted to urban and other non-farm uses.

Losing our prime farmland to other uses will move Oregon's agriculture onto marginal lands — more susceptible to soil erosion. These land conversions will greatly increase land management and crop production costs for future generations.



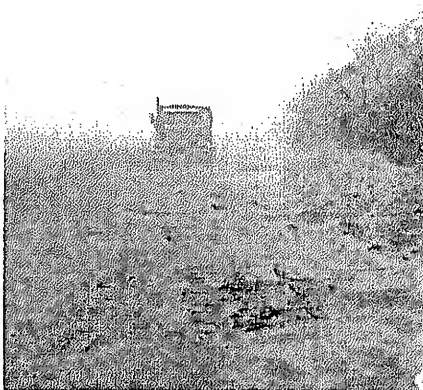
Erosion Is A Concern

Natural soil erosion from the action of wind and water is inevitable. Although loss of topsoil is never desirable, it becomes serious when erosion rates exceed the rate at which new soil is being formed and when it threatens productivity.

Erosion measured in the survey included only **sheet erosion** (the removal of a uniform layer of soil by raindrops and moving water), **rill erosion** (the formation of small channels from surface water runoff), and **wind erosion**. Soil loss from gullies, streambanks, roads, urban development or irrigation were not specifically measured. However, treatment needs for some of these problems were evaluated.

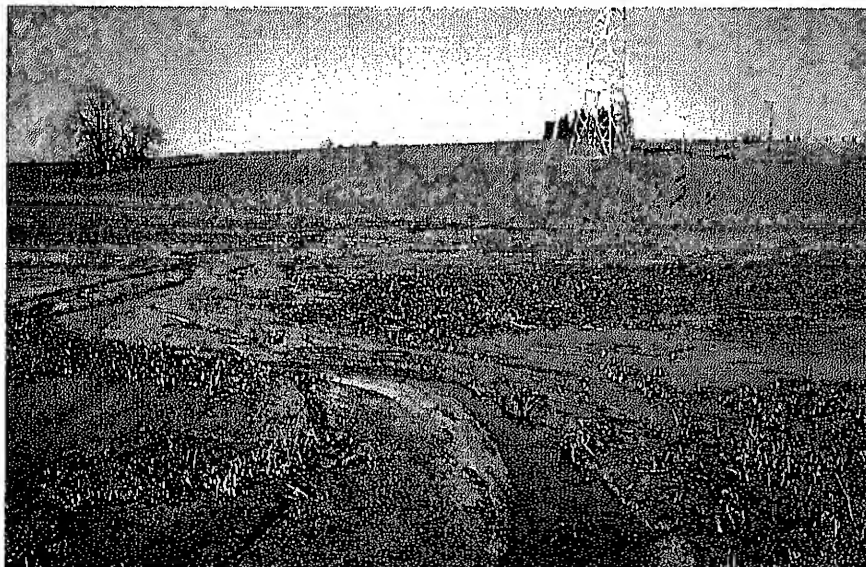
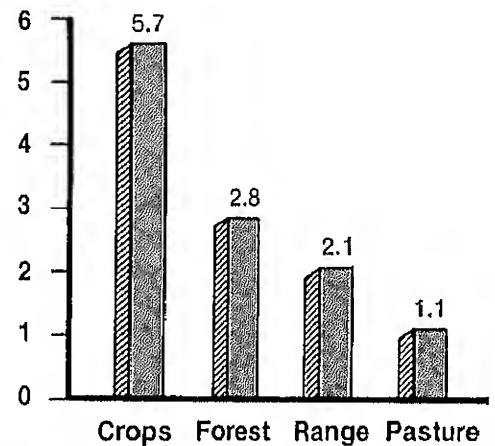
For most Oregon soils an "acceptable" average annual rate of soil loss has been set at between 2 and 5 tons per acre, depending on soil depth and other factors.

Inventory figures show that our most critical erosion is on cropland where almost 2 million acres are losing soil at a rate faster than it can be naturally replaced.



Oregon Average Erosion Rates

Tons/Ac./Yr.



Nonfederal Cropland: ... Situation and Needs

4,356,400 Acres

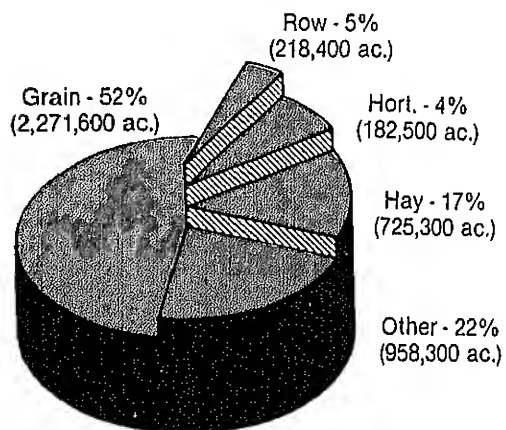
1,563,600 Acres Irrigated (36%)

2,792,800 Acres Nonirrigated (64%)

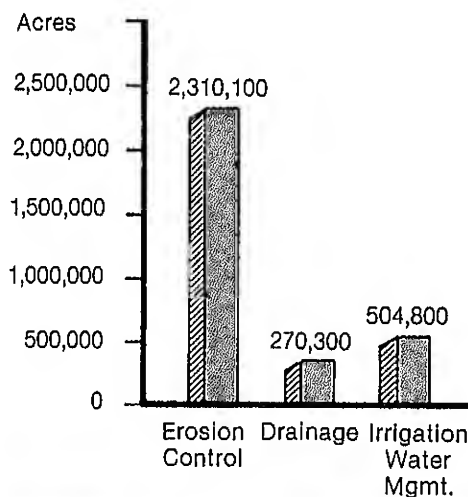


Over 24 million tons of soil are lost annually from Oregon croplands, according to inventory estimates, even though only sheet, rill, and wind erosion were measured. Almost 2 million acres of cropland are eroding at unacceptable rates. In addition to erosion measurements, the survey included a visual evaluation of current cropland conditions which assessed conservation treatment and management needs.

Cropland Use



Conservation Needs



Nonfederal Pasture And Hayland: ... Situation and Needs

1,965,900 Acres

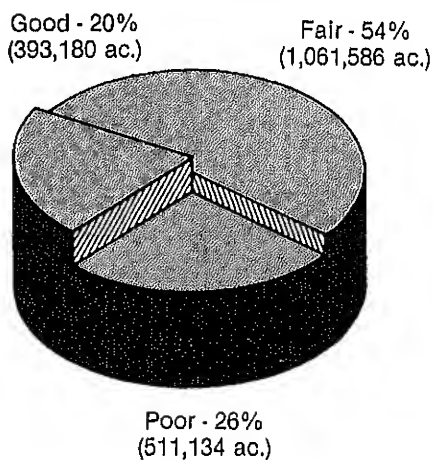
657,600 Acres Irrigated (33%)

1,308,300 Acres Nonirrigated (67%)

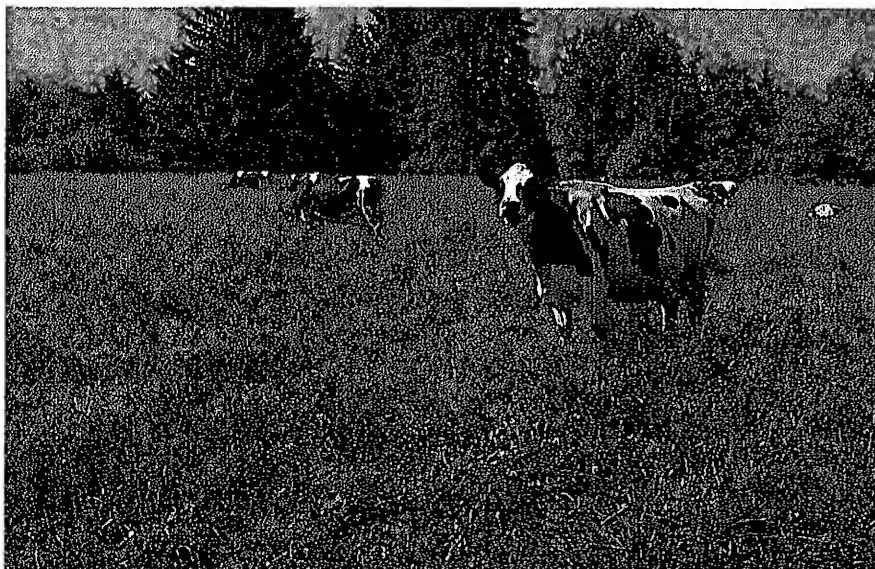
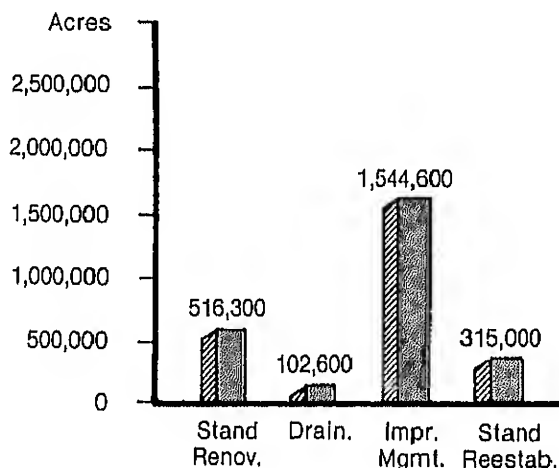


Over 2 million tons of soil are lost annually from Oregon's nonfederal pasture and hayland, according to the Inventory. Estimates show unacceptable erosion rates on 161,000 acres. In addition to erosion measurements, the survey included a visual evaluation of current pastureland conditions which assessed conservation treatment and management needs. There is a need for improved management on 79 percent of the pasture and hayland.

Pasture and Hayland Condition



Conservation Needs



Nonfederal Forest Land: ... Situation and Needs

11,889,200 Acres

3,838,800 Acres Grazed (32%)
8,050,400 Acres Ungrazed (68%)

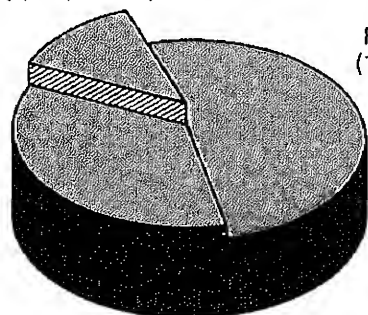


Erosion is a problem on 2 million acres of Oregon's nonfederal forest land, according to inventory estimates. Soil loss on all nonfederal forest lands is estimated to be 32 million tons annually. In addition to erosion measurements, the survey included a visual evaluation of current forest conditions which assessed management and conservation treatment needs. Management needs such as tree planting and thinning were based on that assessment, not on economic feasibility.

Forest Land Ownership

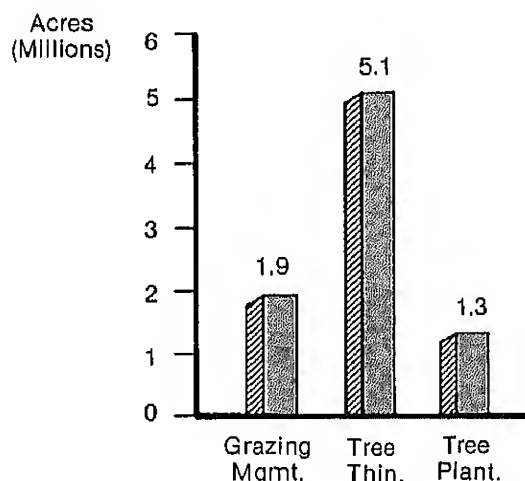
Private - 12%
(3,101,500 ac.)

Federal - 54%
(13,956,900 ac.)



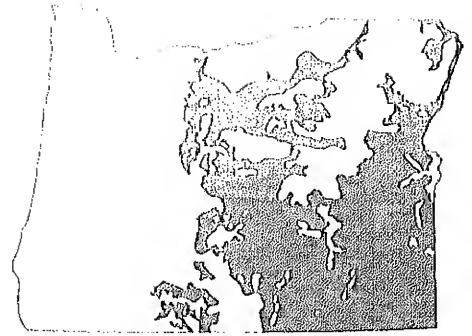
Industrial - 34%
(8,787,700 ac.)

Conservation Needs



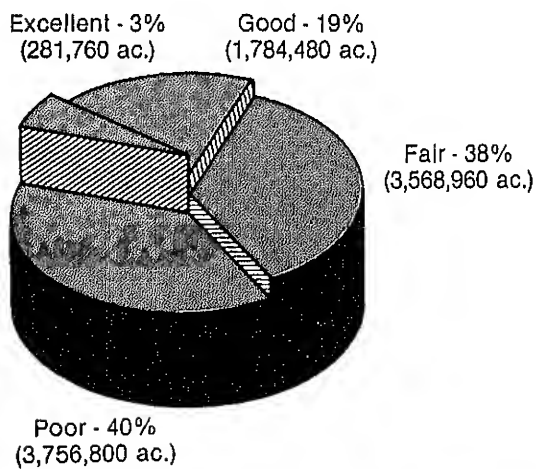
Nonfederal Rangeland: ... Situation and Needs

9,392,000 Acres

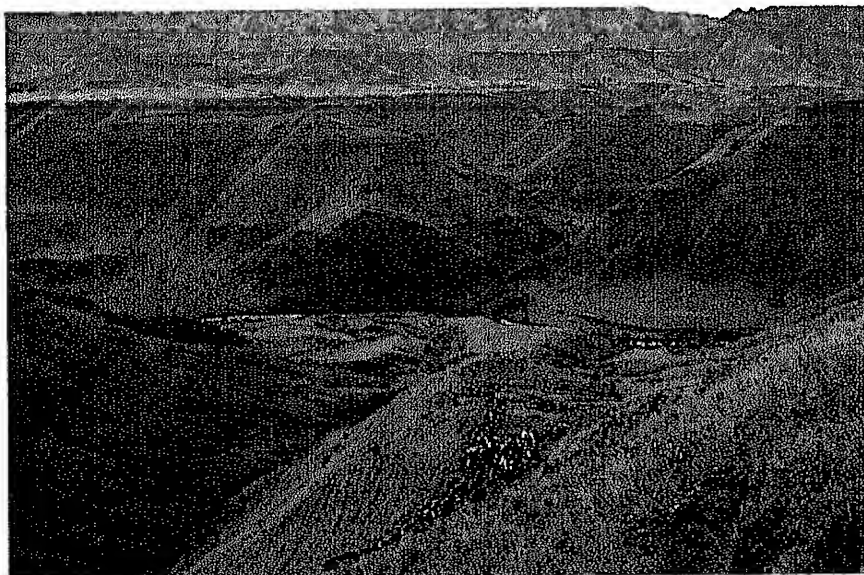
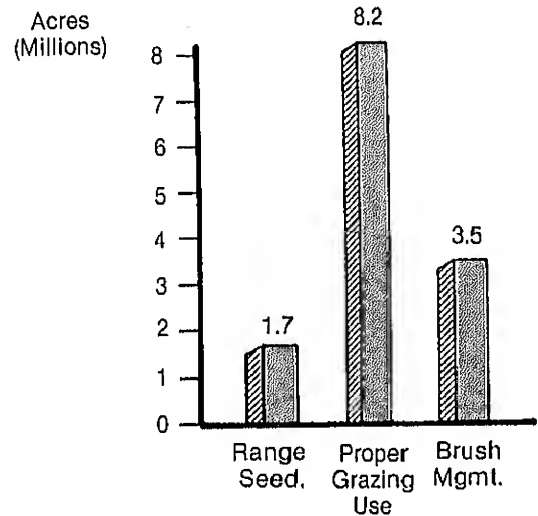


Over 19 million tons of soil are lost annually from Oregon's nonfederal rangelands, according to inventory estimates. Almost 3 million acres of rangeland are eroding at unacceptable rates. In addition to erosion measurements, the survey included a visual evaluation of current rangeland conditions which assessed conservation treatment and management needs.

Rangeland Condition



Conservation Needs

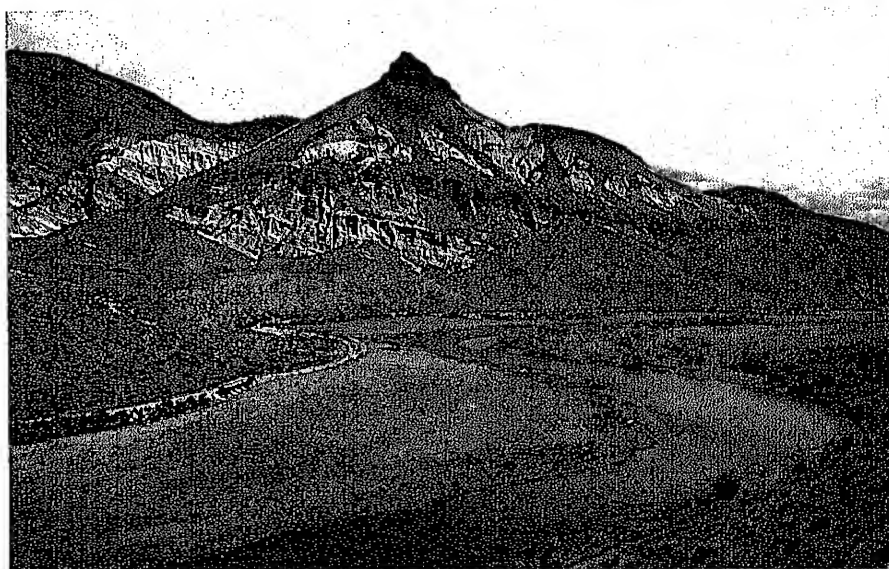
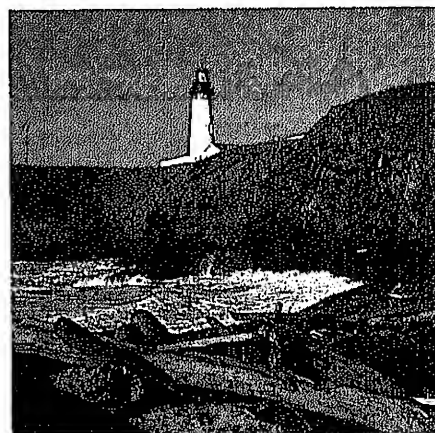


How Oregon Is Divided: Major Land Resource Areas (MLRA's)

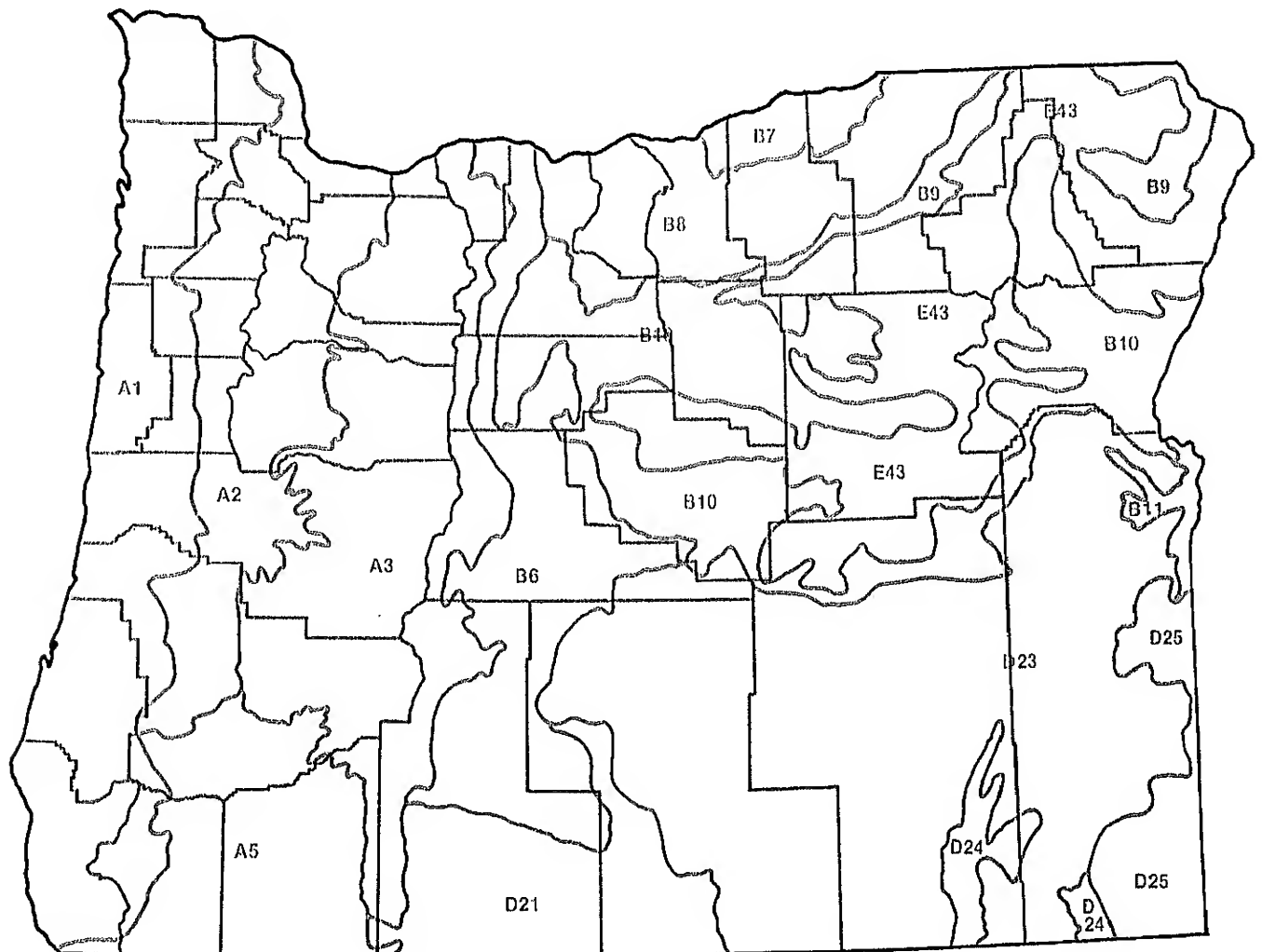
Oregon has 15 major land resource areas. They are grouped geographically by similar patterns of soil (including slope and erosion), climate, vegetation, water resources, land use, and type of farming.

Identifying these areas with similar characteristics provides broad current knowledge about the soil resources of Oregon and is useful in developing and coordinating soil and water conservation programs.

This section includes highlights from the 1982 NRI data on land cover and use, erosion, and conservation treatment needs for each area. All acreages given are for nonfederal land only.



Oregon MLRA's



Legend

A1	Northern Pacific Coast Range, Foothills, and Valleys	B6	Cascade Mountains (Eastern Slope)	B11	Snake River Plains
A2	Willamette and Puget Sound Valleys	B7	Columbia Basin	D21	Klamath and Shasta Valleys and Basins
A3	Olympic and Cascade Mountains (Western Slope)	B8	Columbia Plateau	D23	Malheur High Plateau
A5	Siskiyou-Trinity Area	B9	Palouse and Nez Perce Prairies	D24	Humboldt Area
		B10	Upper Snake River Lava Plains and Hills	D25	Owyhee High Plateau
				E43	Northern Rocky Mountains

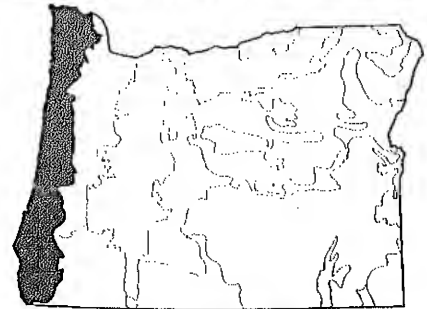
Northern Pacific Coast Range, Foothills, and Valleys

MLRA A1

4,200,500 Acres (Nonfederal)

This resource area is densely forested and the chief industries are wood products related. A small percent of the land is cleared, mainly in the narrow valleys and on coastal terraces, and is used for cropland. Recreation and wildlife habitat are important land uses. Elevations range from sea level to 3,700 feet and annual precipitation varies from 50 to 200 inches.

Annual precipitation varies from 50 to 200 inches.



Cropland

38,900 ac.
9,000 irrigated ac.
29,900 nonirrigated ac.

Unacceptable Erosion

25,200 ac. (65%)

Conservation Needs

Erosion control	25,200 ac.
Drainage	2,100 ac.
Irrig. mgmt.	5,300 ac.

Major Crops

Specialty crops

Forest Land

3,560,200 ac.
55,000 grazed ac.
3,505,200 ungrazed ac.

Unacceptable Erosion

626,300 ac. (18%)

Conservation Needs

Tree planting	392,200 ac.
Tree thinning	2,106,700 ac.
Grazing mgmt.	154,700 ac.

Major Tree Species

Douglas-fir, western hemlock, Sitka spruce, western redcedar

Pastureland

285,000 ac.
15,500 irrigated ac.
269,500 nonirrigated ac.

Unacceptable Erosion

24,800 ac. (9%)

Conservation Needs

Stand reestab.	13,600 ac.
Stand renov.	94,600 ac.
Drainage	44,500 ac.
Improved mgmt.	200,000 ac.

Major Forage Plants

Orchardgrass, perennial rye, New Zealand white clover

Condition

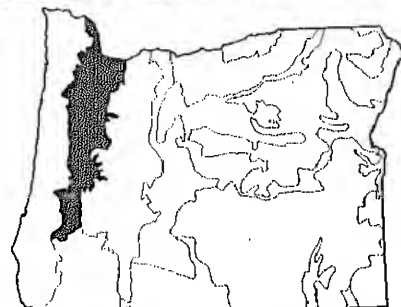
Good	45,300 ac.
Fair to poor	234,900 ac.

Willamette and Puget Sound Valleys

MLRA A2

3,819,000 Acres (Nonfederal)

The Willamette Valley dominates this area and agriculture is diversified. Crops grown here are of high value with little irrigation needed because of an annual average precipitation of from 35 to 75 inches. Erosion is a serious problem where soils are left bare with no cover crop. Elevations range from sea level to 1,600 feet.



Cropland

1,066,100 ac.
306,300 irrigated ac.
759,800 nonirrigated ac.

Unacceptable Erosion

121,100 ac. (11%)

Conservation Needs

Erosion control	279,100 ac.
Drainage	193,800 ac.
Irrig. mgmt.	20,300 ac.

Major Crops

Small grains, grass legume hay, grass/legume seed, berries, vegetable crops, fruit and nuts, nursery crops, specialty crops

Forest Land

1,494,900 ac.
184,100 grazed ac.
1,310,800 ungrazed ac.

Unacceptable Erosion

167,800 ac. (11%)

Conservation Needs

Tree planting	247,400 ac.
Tree thinning	729,200 ac.
Grazing mgmt.	106,300 ac.

Major Tree Species

Douglas-fir, red alder, Oregon white oak, western hemlock

106,500 acres have a medium to high potential for conversion to nonforest use in the next 10-15 years.

Pastureland

678,300 ac.
54,300 irrigated ac.
624,000 nonirrigated ac.

Unacceptable Erosion

72,100 ac. (11%)

Conservation Needs

Stand reestab.	151,000 ac.
Stand renov.	207,000 ac.
Drainage	23,000 ac.
Improved mgmt.	600,000 ac.

Major Forage Plants

Orchardgrass, perennial rye, clover

Condition

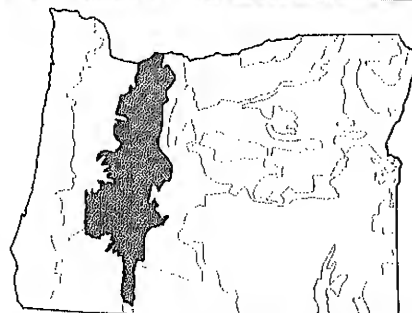
Good	116,700 ac.
Fair to poor	529,000 ac.

Olympic and Cascade Mountains

MLRA A3

4,200,500 Acres (Nonfederal)

Most of this resource area is forested and the chief industries are wood products related. High elevation alpine meadows provide summer forage. Recreation and wildlife habitat are important land uses. Elevations range from 650 to 6,000 feet with some high mountain peaks up to 11,000 feet. Annual precipitation varies from 60 to 130 inches.



Cropland

4,900 ac.
3,000 irrigated ac.
1,900 nonirrigated ac.

Unacceptable Erosion

1,400 ac. (29%)

Conservation Needs

Erosion control 2,300 ac.

Major Crops

Grass seed, grass legume hay, nursery crops, fruit and nuts

Forest Land

1,450,200 ac.
73,700 grazed ac.
1,376,500 ungrazed ac.

Unacceptable Erosion

156,700 ac. (11%)

Conservation Needs

Tree planting 126,400 ac.
Tree thinning 630,700 ac.
Grazing mgmt. 16,800 ac.

Major Tree Species

Douglas-fir, ponderosa pine

Thinning is needed to improve growth and to remove diseased and damaged trees.

Pastureland

14,100 ac.
6,000 irrigated ac.
8,100 nonirrigated ac.

Unacceptable Erosion

6,300 ac. (45%)

Conservation Needs

Stand reestab. 4,500 ac.
Stand renov. 3,600 ac.
Improved mgmt. 13,000 ac.

Major Forage Plants

Orchardgrass, perennial rye, clover

Condition

Good 6,000 ac.
Fair to poor 8,100 ac.

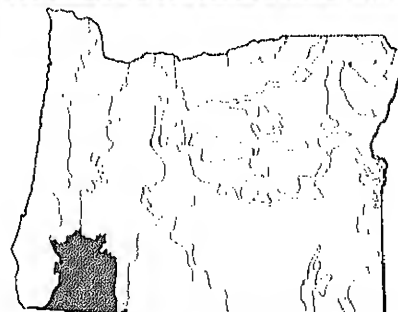
Siskiyou-Trinity Area

MLRA A5

1,637,900 Acres (Nonfederal)

Most of this resource area is conifer forests. Livestock production and wood products are important industries. Horticultural crops are grown in the valleys where there is adequate water for irrigation. Elevations range from 1,900 to 5,000 feet and the average annual precipitation is from 35 to 60 inches. Erosion here

is severe when plant cover is removed.



Cropland

54,900 ac.
44,300 irrigated ac.
10,600 nonirrigated ac.

Unacceptable Erosion

3,000 ac. (5%)

Conservation Needs

Erosion control	3,900 ac.
Drainage	4,100 ac.
Irrig. mgmt.	22,300 ac.

Major Crops

Small grains, grass legume hay

Forest Land

1,195,000 ac.
346,300 grazed ac.
848,700 ungrazed ac.

Unacceptable Erosion

324,200 ac. (27%)

Conservation Needs

Tree planting	250,300 ac.
Tree thinning	519,000 ac.
Grazing mgmt.	129,900 ac.

Major Tree Species

Douglas-fir, ponderosa pine

Timber reestablishment is difficult on hot, dry, south facing slopes in this area.

Pastureland

163,000 ac.
69,200 irrigated ac.
93,600 nonirrigated ac.

Unacceptable Erosion

19,300 ac. (12%)

Conservation Needs

Stand reestab.	68,000 ac.
Stand renov.	18,000 ac.
Improved mgmt.	145,000 ac.

Major Forage Plants

Orchardgrass, perennial rye, clover

Condition

Good	29,000 ac.
Fair to poor	142,000 ac.

Cascade Mountains, Eastern Slope

MLRA B6

2,005,700 Acres (Nonfederal)

This resource area is largely forested and the main industries are wood products related. Much of the woodland is grazed by cattle and the area is also important for recreation and wildlife habitat. Elevations range from 900 to 7,000 feet and average annual precipitation varies from 20 to 60 inches.



Cropland

147,900 ac.
94,900 irrigated ac.
53,000 nonirrigated ac.

Unacceptable Erosion

61,000 ac. (41%)

Conservation Needs

Erosion control 64,100 ac.
Irrig. mgmt. 19,600 ac.

Major Crops

Small grains, alfalfa, grass
legume hay, mint

Forest Land

1,250,300 ac.
511,800 grazed ac.
678,500 ungrazed ac.

Unacceptable Erosion

67,200 ac. (5%)

Conservation Needs

Tree planting 65,400 ac.
Tree thinning 471,400 ac.
Grazing mgmt. 391,200 ac.

Major Tree Species

Ponderosa pine, lodgepole pine,
Douglas-fir, western juniper

*Thinning is needed to improve
growth and to remove diseased
and damaged trees.*

Rangeland

376,800 ac.

Unacceptable Erosion

41,500 ac. (11%)

Conservation Needs

Brush mgmt. 173,000 ac.
Range seeding 117,000 ac.
Proper grazing 328,000 ac.

Major Plants

Antelope bitterbrush, Idaho
fescue, big sagebrush

Condition

Good to excellent 68,000 ac.
Fair to poor 305,800 ac.

*Urban and recreation developments
have had severe adverse impacts
on wildlife habitat.*

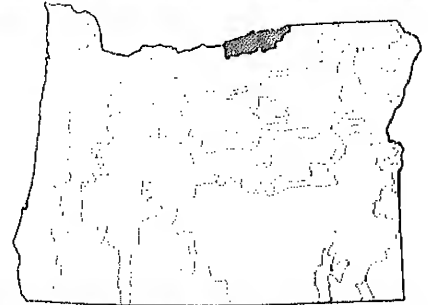
Columbia Basin

MLRA B7

394,000 Acres (Nonfederal)

Cropland is important in this resource area with about 60 percent of the crops irrigated and the remainder in a wheat-fallow rotation. Deep wells are the source for irrigation water and lowering water tables are a problem. Erosion from water runoff on sloping cropland is also a concern and is accelerated when soils

are frozen. Elevations range from 800 to 1,600 feet and the average annual precipitation varies from 6 to 12 inches.



Cropland

213,900 ac.
127,800 irrigated ac.
86,100 nonirrigated ac.

Unacceptable Erosion

142,400 ac. (67%)

Conservation Needs

Erosion control 119,280 ac.
Irrig. mgmt. 39,400 ac.

Major Crops

Small grains, potatoes, alfalfa hay

Rangeland

118,000 ac.

Unacceptable Erosion

12,400 ac. (10%)

Conservation Needs

Brush mgmt. 20,000 ac.
Range seeding 22,000 ac.
Grazing mgmt. 55,000 ac.

Major Plants

Antelope bitterbrush, needleand-thread, bluebunch wheatgrass, big sagebrush, stiff sagebrush, Sandberg bluegrass

Condition

Good to excellent 29,500 ac.
Fair to poor 88,500 ac.

This area is ideally suited to winter livestock grazing.

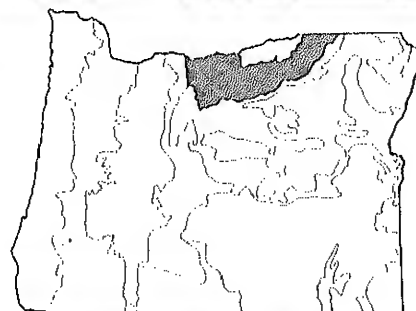
Columbia Plateau

MLRA B8

2,974,300 Acres (Nonfederal)

This resource area is predominantly farms and ranches where nonirrigated wheat production is the main industry. A wheat-fallow crop sequence is often used. Annual cropping is used on some shallow soils where winter precipitation provides moisture to fill the soil profile.

Erosion from water runoff over frozen soils can be severe. Some acreages along major streams are irrigated. Elevations range from 800 to 3,400 feet and the average annual precipitation varies from 9 to 18 inches.



Cropland

1,595,700 ac.
111,000 irrigated ac.
1,484,700 nonirrigated ac.

Pastureland

44,000 ac.
10,500 irrigated ac.
33,200 nonirrigated ac.

Rangeland

1,251,900 ac.

Unacceptable Erosion

1,387,500 ac. (87%)

Unacceptable Erosion

18,200 ac. (41%)

Unacceptable Erosion

628,100 ac. (50%)

Conservation Needs

Erosion control 1,468,100 ac.
Irrig. mgmt. 25,600 ac.

Conservation Needs

Stand. reestab. 3,400 ac.
Stand renov. 4,600 ac.
Improved mgmt. 33,000 ac.

Conservation Needs

Brush mgmt. 172,000 ac.
Range seeding 140,000 ac.
Proper grazing use 1,125,000 ac.

Major Crops

Small grains, alfalfa, dry peas

Major Forage Plants

Tall fescue, orchardgrass

Major Plants

Big sagebrush, bluebunch wheatgrass, Idaho fescue, three-tip sagebrush, Sandberg bluegrass, stiff sagebrush

Condition

Good to fair 32,400 ac.
Poor 11,600 ac.

Condition

Good to excellent 327,300 ac.
Fair to poor 911,300 ac.

This area is ideally suited to winter livestock grazing.

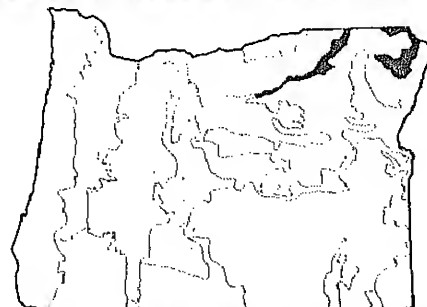
Palouse and Nez Perce Prairies

MLRA B9

1,266,000 Acres (Nonfederal)

Dry-farmed wheat is the major industry in this resource area. Livestock production is important too, and some irrigated cropland occurs along streams. Severe erosion occurs on sloping croplands where crop residues are not maintained; however, no-till farming is increasing here. Elevations range from 1,600 to 5,000

feet and the average annual precipitation varies from 10 to 25 inches.



Cropland

254,400 ac.
86,000 irrigated ac.
168,400 nonirrigated ac.

Unacceptable Erosion

128,700 ac. (51%)

Conservation Needs

Erosion control	151,200 ac.
Drainage	5,600 ac.
Irrig. mgmt.	2,600 ac.

Major Crops

Alfalfa, alfalfa grass hay, small grains

Forest Land

106,900 ac.
106,900 grazed ac.

Unacceptable Erosion

11,400 ac. (11%)

Conservation Needs

Grazing mgmt.	17,000 ac.
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Major Tree Species

Ponderosa pine, Douglas-fir

Rangeland

804,500 ac.

Unacceptable Erosion

295,700 ac. (37%)

Conservation Needs

Brush mgmt.	15,000 ac.
Range seeding	33,000 ac.
Proper grazing use	344,000 ac.

Major Plants

Idaho fescue, three-tip sagebrush, black hawthorne, snowberry

Condition

Good to excellent	451,600 ac.
Fair to poor	356,100 ac.

Upper Snake River Lava Plains and Hills

MLRA B10

4,240,000 Acres (Nonfederal)

The nonfederal land in this resource area is primarily rangeland and livestock production on farms and ranches is important. Small tracts of deep soils are dry-farmed and there are small grain crops irrigated with water from mountain streams and storage reservoirs. Elevations in the area range from

2,200 to 6,000 feet and annual precipitation varies from 8 to 25 inches. The Baker Valley bottomlands need improved drainage and reduction of salinity. Wind erosion is a serious problem in the Grande Ronde Valley.



Cropland

261,900 ac.
172,000 irrigated ac.
89,900 nonirrigated ac.

Unacceptable Erosion

50,500 ac. (19%)

Conservation Needs

Erosion control 73,800 ac.
Drainage 3,100 ac.
Irrig. mgmt. 62,600 ac.

Major Crops

Grains, alfalfa, alfalfa grass hay

Pastureland

138,100 ac.
72,600 irrigated ac.
65,500 nonirrigated ac.

Unacceptable Erosion

8,200 ac. (6%)

Conservation Needs

Stand reestab. 282,000 ac.
Stand renov. 18,300 ac.
Drainage 38,300 ac.
Improved mgmt. 101,000 ac.

Major Forage Plants

Tall fescue, orchardgrass, alfalfa

Condition

Good 23,300 ac.
Fair to poor 114,200 ac.

Rangeland

2,815,900 ac.

Unacceptable Erosion

961,600 ac. (34%)

Conservation Needs

Brush mgmt. 922,000 ac.
Range seeding 424,000 ac.
Proper grazing use 2,524,000 ac.

Major Plants

Bluebunch wheatgrass, Thurber needlegrass, big sagebrush

Condition

Good to excellent 594,200 ac.
Fair to poor 2,169,100 ac.

Major juniper expansion has taken place within the last century.

Forest Land

875,400 ac.
793,000 grazed ac.
82,400 ungrazed ac.

Unacceptable Erosion

342,500 ac. (39%)

Conservation Needs

Tree planting 17,600 ac.
Tree thinning 104,700 ac.
Grazing mgmt. 482,200 ac.

Major Tree Species

Western juniper

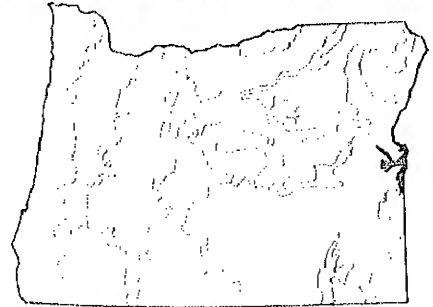
Thinning overstocked stands will improve tree growth and increase grazing capacity.

Snake River Plains

MLRA B11

294,800 Acres (Nonfederal)

A variety of crops are produced on irrigated cropland in this resource area. Irrigation water is provided from streams and storage reservoirs and is a cause of furrow erosion. Elevations range from 2,100 to 3,000 feet. The average annual precipitation is from 8 to 12 inches.



Cropland

184,700 ac.
178,400 irrigated ac.
6,300 nonirrigated ac.

Rangeland

48,200 ac.

Unacceptable Erosion

48,400 ac. (26%)

Unacceptable Erosion

6,100 ac. (13%)

Conservation Needs

Erosion control 16,700 ac.
Irrig. mgmt. 130,600 ac.

Conservation Needs

Brush mgmt. 13,000 ac.
Range seeding 14,000 ac.
Proper grazing use 39,000 ac.

Major Crops

Alfalfa hay, small grains,
vegetable crops

Major Plants

Bluebunch wheatgrass, Thurber
needlegrass, big sagebrush

Condition

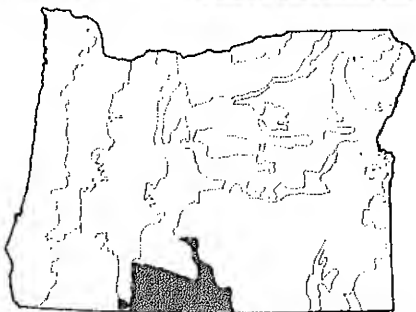
Good to excellent 4,800 ac.
Fair to poor 43,400 ac.

Klamath and Shasta Valleys and Basins

MLRA D21
1,256,900 Acres (Nonfederal)

Livestock and irrigated cash crops are produced in this resource area and are its main industry. In the valley basins maintaining good drainage is a concern. Some sites need protection from overflow and others are affected by alkali. Elevations range from 4,100 to 6,000 feet

and average annual precipitation varies from 14 to 20 inches.



Cropland

139,700 ac.
127,700 irrigated ac.
12,000 nonirrigated ac.

Pastureland

149,000 ac.
89,300 irrigated ac.
59,700 nonirrigated ac.

Rangeland

295,000 ac.

Unacceptable Erosion

5,300 ac. (4%)

Unacceptable Erosion

8,400 ac. (6%)

Unacceptable Erosion

80,000 ac. (27%)

Conservation Needs

Erosion control 9,300 ac.
Drainage 12,200 ac.
Irrig. mgmt. 63,800 ac.

Conservation Needs

Stand reestab. 14,200 ac.
Stand renov. 23,400 ac.
Drainage 64,300 ac.
Improved mgmt. 137,000 ac.

Conservation Needs

Brush mgmt. 140,000 ac.
Range seeding 88,000 ac.
Proper grazing use 271,000 ac.

Major Crops

Alfalfa, alfalfa grass hay, small grains

Major Forage Plants

Tall fescue, orchardgrass, alfalfa

Major Plants

Bluebunch wheatgrass, Idaho fescue, Nevada bluegrass, big sagebrush, basin wildrye, antelope bitterbrush

Condition

Good 9,500 ac.
Fair to poor 101,300 ac.

Condition

Good to excellent 41,500 ac.
Fair to poor 236,900 ac.

Forest Land

601,500 ac.
408,300 grazed ac.
193,200 ungrazed ac.

Unacceptable Erosion

80,200 ac. (13%)

Conservation Needs

Tree planting 64,100 ac.
Tree thinning 174,700 ac.
Grazing mgmt. 201,500 ac.

Major Tree Species

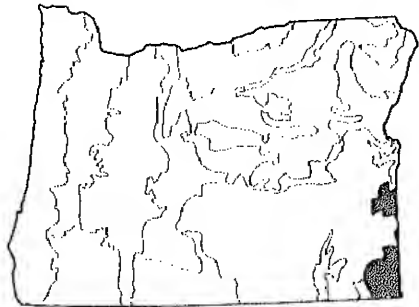
Ponderosa pine, Douglas-fir, western juniper

Thinning overstocked stands will improve tree growth and increase grazing capacity.

Owyhee High Plateau

MLRA D25
161,800 Acres (Nonfederal)

Livestock production on rangelands is the main agricultural activity. Some small cropland tracts in valleys are irrigated. Elevation ranges from 2,900 to 7,000 feet and average annual precipitation varies from 6 to 12 inches.



Cropland		Rangeland	
4,700 ac.		156,300 ac.	
4,700 irrigated ac.			
Unacceptable Erosion		Unacceptable Erosion	
None identified		39,500 ac. (25%)	
Conservation Needs		Conservation Needs	
Irrig. mgmt.	4,700 ac.	Brush mgmt.	106,000 ac.
		Proper grazing use	121,000 ac.
Major Crops		Major Plants	
Small grains, hay		Bluebunch wheatgrass, big sagebrush, Idaho fescue, low sagebrush, basin wildrye	
		Condition	
		Good to excellent	25,300 ac.
		Fair to poor	131,000 ac.

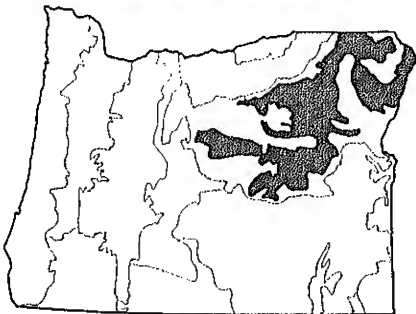
Northern Rocky Mountains

MLRA E43

2,112,900 Acres (Nonfederal)

Most of this resource area is forested and controlled by large commercial timber companies. Recreation, wildlife habitat, and timber production are all important land uses. Meadows and mountain slopes provide summer grazing for both livestock and wildlife. Elevations range from 3,500 to 9,600

feet and average annual precipitation varies from 25 to 80 inches.



Cropland

54,400 ac.
7,600 irrigated ac.
46,800 nonirrigated ac.

Unacceptable Erosion

None identified

Conservation Needs

Drainage 2,200 ac.
Irrig. mgmt. 2,500 ac.

Major Crops

Small grains, hay

Forest Land

1,249,100 ac.
1,207,800 grazed ac.
41,300 ungrazed ac.

Unacceptable Erosion

221,100 ac. (18%)

Conservation Needs

Tree planting 99,600 ac.
Tree thinning 359,300 ac.
Grazing mgmt. 335,000 ac.

Major Tree Species

Ponderosa pine, Douglas-fir,
lodgepole pine, western juniper,
western larch

*Improved forest management will
reduce soil and water conservation
problems and contribute to
future timber supplies.*

Rangeland

752,100 ac.

Unacceptable Erosion

208,800 ac. (28%)

Conservation Needs

Brush mgmt. 190,600 ac.
Range seeding 70,100 ac.
Proper grazing use 567,700 ac.

Major Plants

Bluebunch wheatgrass, big
sagebrush, Idaho fescue

Condition

Good to excellent 254,700 ac.
Fair to poor 497,400 ac.

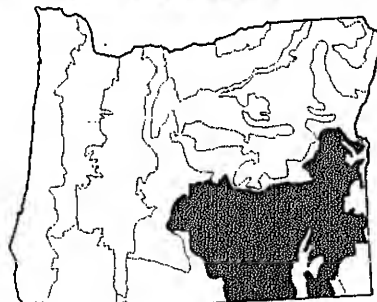
Malheur High Plateau

MLRA D23

3,044,800 Acres (Nonfederal)

Native range vegetation covers much of this area and there are small forested areas on upper mountain slopes. Of major importance is livestock production on rangeland supported by irrigated hay and pasture. Elevations range from 4,400 to 8,000 feet and average annual

precipitation varies from 8 to 14 inches.



Cropland

331,700 ac.
289,600 irrigated ac.
42,100 nonirrigated ac.

Unacceptable Erosion

17,300 ac. (5%)

Conservation Needs

Erosion control	65,800 ac.
Drainage	47,200 ac.
Irrig. mgmt.	104,200 ac.

Major Crops

Alfalfa, grass legume hay,
small grains

Forest Land

105,700 ac.
91,900 grazed ac.
13,800 ungrazed ac.

Unacceptable Erosion

6,100 ac. (6%)

Conservation Needs

Tree thinning	46,100 ac.
Grazing mgmt.	55,100 ac.

Major Tree Species

Ponderosa pine, quaking aspen,
western juniper

*Forests are limited to small
areas in the upper slopes
of the Steens Mountains.*

Rangeland

2,300,500 ac.

Unacceptable Erosion

531,600 ac. (23%)

Conservation Needs

Brush mgmt.	1,428,000 ac.
Range seeding	758,000 ac.
Proper grazing use	2,181,700 ac.

Major Plants

Bluebunch wheatgrass, Idaho fescue,
big sagebrush, silver sagebrush,
antelope bitterbrush

Condition

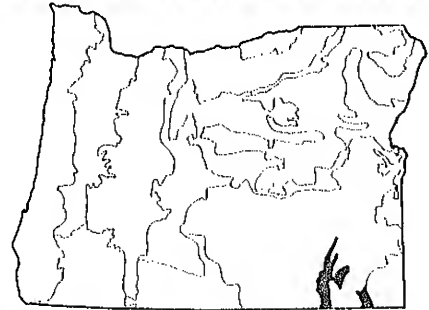
Good to excellent	237,500 ac.
Fair to poor	2,023,300 ac.

Humboldt Area

MLRA D24

385,200 Acres (Nonfederal)

Livestock grazing on native range is the principal agricultural enterprise. Small areas — generally narrow strips along major streams — are irrigated. Hay production supports resident livestock. Elevations range from 4,000 to 5,000 feet and average annual precipitation varies from 6 to 12 inches.



Cropland

2,600 ac.
1,300 irrigated ac.
1,300 nonirrigated ac.

Unacceptable Erosion

None identified

Conservation Needs

Irrig. mgmt. 1,300 ac.

Major Crops

Small grains, hay

Rangeland

376,700 ac.

Unacceptable Erosion

107,000 ac. (28%)

Conservation Needs

Brush mgmt. 205,000 ac.
Range seeding 72,000 ac.
Proper grazing use 315,000 ac.

Major Plants

Shadscale, bud sagebrush,
Indian ricegrass, black
greasewood, inland saltgrass

Condition

Good to excellent 357,865 ac.
Fair to poor 18,835 ac.



You can help!

.....become aware

.....express concern

.....support conservation!

For information contact:

Your local Soil and Water Conservation District
or USDA - Soil Conservation Service office

Division of Soil & Water Conservation
Oregon Department of Agriculture
Salem, Oregon

State Office
Soil Conservation Service
Portland, Oregon